

# Christopher Stephen Cooper

Curriculum Vitae

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National Park Service  
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## Education

- 2016 – 2019            M.S. Geography  
Department of Geography, University of Georgia, Athens, GA  
\* Expected Graduation: 2019, GPA: 3.6/4.0
- 2013 - 2015            B.S. Geography - Earth System Science  
Geographic Information Science (*GIScience*) Certificate  
Department of Geography, University of Georgia, Athens, GA  
\* GPA: 3.5/4.0
- 2011 - 2012            Associate of Arts in Political Science  
University of North Georgia, Watkinsville, GA

## Awards and Honors:

- 2017                    Geological Society of America Graduate Student Research Grant (\$1,550)
- Spring 2015          Gamma Theta Upsilon- The International Geographic Honor Society
- Fall 2013              Dean's List- Franklin College
- Fall 2013              Member of National Society of Leadership

## Employment and Appointments

- 2016 – 2019          National Park Service, Inventory & Monitoring Division, Southeast Coast Network

*Research Assistant*- served as GIS analyst, primary cartographer, and field technician for Wadeable Stream Habitat Monitoring Protocol.

Summer 2016 National Aeronautics and Space Administration (NASA)

*DEVELOP Project Researcher*- contributed to the development of a predictive model which is used to derive the geographic distribution of *hydrilla verticillata* from remotely-sensed Landsat 8 spectra.

2014 - 2015 Environmental Change Lab, Department of Geography, University of Georgia

*Research Assistant*- collect and process lake sediments for various paleoclimate proxies.

## Peer-Reviewed Publications

### Journal Articles

2019--- Kumar, A., **Cooper, C.**, Remillard, C.M., Ghosh, S., Haney, A., Braun, F., Conner, Z., Page, B., Boyd, K., Wilde, S., and D.S. Mishra. 2019. Spatiotemporal monitoring of hydrilla [*Hydrilla verticillata* (L.f.) Royle] to aid management actions: Weed Technology. doi: 10.1017/wet.2019.13

### Technical Reports

In review - **Cooper, C.S.**, McDonald, J. M., and Starkey, E.N., Congaree National Park – Wadeable Stream Monitoring Baseline Report. Natural Resource Report NPS/SECN/NRR—xxxx/xxxx. National Park Service, Fort Collins, Colorado. Submitted Mar. 2019.

- **Cooper, C.S.**, McDonald, J. M., and Starkey, E.N., Ocmulgee National Monument – Wadeable Stream Monitoring Baseline Report. Natural Resource Report NPS/SECN/NRR—xxxx/xxxx. National Park Service, Fort Collins, Colorado. Submitted Feb. 2019.

- McDonald, J.M. Starkey, E.N., and **Cooper, C.S.**, Chattahoochee National Recreation Area – Wadeable Stream Monitoring Baseline Report. Natural Resource Report NPS/SECN/NRR—xxxx/xxxx. National Park Service, Fort Collins, Colorado. Submitted Dec. 2018.

### Standard Operating Procedures

2019 -- McDonald, J.M. and **Cooper, C.S.**, Obtaining and interpreting GPS solutions using OPUS and OPUS Projects—Version 1.0. Southeast Coast Network Standard Operating Procedure NPS/SECN/SOP—2.3.12. Southeast Coast Network, Athens, Georgia

## Internally-Reviewed Publications

2019 -- Wright, W., E. N. Starkey, and **S. Cooper**. 2019. Assessment of Estuarine Water and Sediment Quality at Fort Matanzas National Monuments: 2017 Data Summary. Natural Resource Data Series NPS/SECN/NRDS—2019/1202. National Park Service, Fort Collins, Colorado

## Conference Presentations

### *Paper Presentations*

- 2019 — **Cooper C.S.**, Porinchu, D.F., Reinemann, S.A., Mark, B.G., and DeGrand, J.Q. Evidence for an infrequent and severe fire event in Great Basin National Park, NV during the late 15th century: 9<sup>th</sup> International Radiocarbon & Archaeology Symposium, Athens, GA, May 20-24.
- **Cooper S.**, Reinemann, S.A., Mark, B.G., DeGrand, J.Q, and Porinchu, D.F. A lake sediment-based reconstruction of fire history spanning the last two millennia from Great Basin National Park, NV: American Association of Geographers, Annual Meeting, Washington D.C., April 4.
- 2018 — **Cooper C.S.** and Porinchu, D.F., A lake sediment based reconstruction of late Holocene fire history from Great Basin National Park: American Association of Geographers, Annual Meeting, New Orleans, LA, April 10.

### *Poster Presentations*

- 2019 — **Cooper, C.S.**, McDonald, J.M., and Starkey, E.N. Wadeable Stream Habitat Monitoring at Ocmulgee National Monument: American Association of Geographers, Annual Meeting, Washington, D.C., April 4.
- Porinchu, D.F., **Cooper S.**, Reinemann, S., DeGrand, J., and Mark, B. Evidence for a severe fire event in Great Basin National Park, NV during the late 15th century: 29<sup>th</sup> Pacific Climate Workshop (PACLIM 2019), Pacific Grove, CA, February 7-10.
- 2018 – Warren, M., Shepherd, J.M., Williams, M, and **Cooper, C.S.** Atmospheric Impacts on the Growing Frequency of Forest Fires in Southern Appalachia. American Association of Geographers, Annual Meeting, New Orleans, LA, April 10.

## Certificates

- National Safety Council Adult CPR-AED Certified (February 2019)
- Department of the Interior Motorboat Operator Certification (May 2018)
- University of Georgia, Department of Geography, Geographic Information Science (*GIScience*) Certificate Program (December 2015)

## Technical Skills

- **Software:** Trimble Business Center, ESRI ArcGIS, ArcGIS Pro, ArcGIS AGOL, QGIS, ENVI 5.0, ENVI IDL, ERDAS Imagine 2018, SeaDAS (NASA), R, R-Studio, OPUS Projects (National Geodetic Survey), YSI KorEXO, HOBOWare PRO, Adobe Illustrator, Microsoft Office Suite (Word, Access, PowerPoint, Excel)
- **Instruments & Equipment:** Trimble S6 robotic total station and TSC3 controller, Garmin GPSMap handheld GPS, HOBOWare data-loggers, Spectra Vista XHR1024i and GER1500 spectroradiometers, Bartington MS2K magnetic susceptibility meter, Russian peat-corer, modified Livingstone piston-corer, gravity-corer, modified gas-powered Vibracorer, standard laboratory equipment (centrifuge, fume hood, muffle furnace, microbalance, binocular microscope), standard limnology instruments (secchi disk, YSI multiparameter instruments)

## **Field Experience**

### *National Park Service: Southeast Coast Network*

- 2018 Assisted in groundwater monitoring at Cumberland Island National Seashore.
- 2018 Assisted in conducting longitudinal profile surveys of streams within Chattahoochee National Recreation Area in Roswell, GA.
- 2018 Assisted in implementing the Wadeable Stream Monitoring protocol over 5 days at Congaree National Park in Hopkins, SC.
- 2017 Assisted in implementing the Wadeable Stream Monitoring protocol over 4 days at Kennesaw Mountain National Battlefield Park in Marietta, GA.
- 2017 Assisted in implementing the Wadeable Stream Monitoring protocol over 2 weeks at Chattahoochee National Recreation Area in Roswell, GA.
- 2017 Assisted in implementing the Wadeable Stream Monitoring protocol over three days at Ocmulgee National Monument in Macon, GA.
- 2017 Assisted in conducting total station surveys to monitor erosion of earthworks at Moores Creek National Battlefield in Currie, NC.

### *Environmental Change Laboratory, Department of Geography, University of Georgia*

- 2017 Collected data from temperature loggers at remote, high-elevation locations within Great Basin National Park, NV in assistance of NPS personnel participating in the Global Observation Research Initiative in Alpine Environments (GLORIA).
- 2017 Collected sediment cores from high-elevation meadow locations over 8 days in Great Basin National Park, NV.
- 2017 Collected sediment cores (including long-coring from a platform), limnology data, and water samples from alpine and sub-alpine lakes over 2 weeks in Rocky Mountain National Park, CO.
- 2016 Collected sediment and limnology data from sub-alpine lakes while assisting researchers from The Ohio State University and University of Georgia over six days in Great Basin National Park, NV.
- 2015 Collected sediment cores and limnology data from alpine and sub-alpine lakes over 2 weeks in Rocky Mountain National Park, CO.
- 2015 Operated a GER1500 spectroradiometer to collect data about chlorophyll-a in Lake Herrick, GA.

### *NASA Develop*

- 2016 Operated an XHR1024i spectroradiometer and collected data about submerged vegetation in Lake J. Strom Thurmond and Long Branch reservoir, GA for NASA DEVELOP Southeast Ecological Forecasting III project.

## **Professional Memberships**

- 2015 – Present American Association of Geographers